

Notice of Allowability

Application No.

10/026,368

Examiner

Lina Yang

Applicant(s)

ACHLER, ISAAC

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/17/01.
2. ☒ The allowed claim(s) is/are 1-6.
3. ☒ The drawings filed on 12/17/2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 11/12/04, 12/2/04, 12/17/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-6 are allowed.

The following is an examiner's statement of reasons for allowance:

Claims 1-6 are allowable since prior art of record, in addition to other limitations recited in claims 1-6, does not teach or suggest a data optimization engine for deoptimizing selected frames of a first stream of data, comprising: a receive interface circuit coupled to an optimization processor, said receive interface circuit being configured for receiving said first stream of data, said receive interface circuit includes a traffic controller circuit for separating frames in said first stream of data into a first deoptimizable frame and a first non-deoptimizable frame, and a deoptimization front-end circuit coupled to said traffic controller circuit to receive at least a first portion of said first deoptimizable frame, said deoptimization front-end circuit including a protocol conversion circuit configured to convert data in said first portion of said first deoptimizable frame from a first protocol to a second protocol suitable for processing by said optimization processor, said first protocol specifies a first word length, said second protocol specifies a second word length different from said first word length, wherein said optimization processor is configured to deoptimize said first portion of said first deoptimizable frame by performing at least one of decompression and decryption on said first portion of said first deoptimizable frame.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Devoe et al. (U. S. Patent Application No. 20020165957 A1) discloses a method for intelligent dynamic route selection based on active probing of network operational characteristics. The method provides routers with sufficient and timely network awareness for them to route data based on optimized network routing decisions.

Holzle et al. (U. S. Patent No. 5,933,635) discloses a method and apparatus for dynamically deoptimizing compiled activations. More specifically, a computer-implemented method for deoptimizing a compiled activations includes creating a data structure. The data structure, which is separate from the control stack, is arranged to store information relating to the compiled method. A reference indicator, such as a pointer, is created to associate the data structure with the frame. The method, which is compiled to a first state of optimization, is then deoptimized to a second state of

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optimization, and the method in the first state of optimization may be discarded, thereby deoptimizing the frame. When control returns to the deoptimized frame, a migration routine creates at least one new stack frame, and execution may continue using the method in the second state of optimization.

Witt (U. S. Patent No. 6,321,326 B1) discloses a prefetch instruction specifying destination functional unit and read/write access mode. In one embodiment, the microprocessor includes functional units configured to operate upon various data type. Each different type of functional unit may be connected to different caches which are optimized for the various access modes. The prefetch instruction may include a functional unit specification in addition to the access mode. In this manner, data of a particular type may be prefetched into a cache local to a particular functional unit.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lina Yang whose telephone number is (571)272-3151. The examiner can normally be reached on 7:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LY



ALPUS H. HSU
PRIMARY EXAMINER